

IN THE CLAIMS:

Claims 1-15 (Canceled)

16. (Currently Amended) A computer program product for assessing security of a network perimeter, the computer program product comprising: ~~a computer usable medium having a computer readable program embodied in the medium, wherein the computer readable program when executed on a computing device is operable to cause the computing device to:~~

one or more computer-readable tangible storage devices and program instructions stored on at least one of the one or more storage devices, the program instructions comprising:

program instructions to review security of ~~the~~a network perimeter architecture by executing tests to attempt to circumvent security controls of the network perimeter;

program instructions to review security of a firewall at ~~data processing devices that transfer data across the~~ network perimeter of the network by analyzing message flow rules of the firewall;

program instructions to review security of ~~an~~ applications that transfers data across saidthe network perimeter by analyzing message flows and a protocol used by the application;

program instructions to review security of an authentication computer from attack, the authentication computer residing within the network perimeter and authenticating users outside of the network perimeter that request access to an application within the network perimeter;

program instructions to review vulnerability of a gateway computer at the network perimeter applications or data processing devices within said perimeter from application computers or users outside of the said network perimeter by scanning ports on the gateway computer to determine whether unauthorized services from the applications outside the network perimeter are available within the network perimeter via the gateway computer, and determining and executing penetration tests on the gateway computer to attempt to exploit a vulnerability of the gateway computer as revealed by the scanning of the ports on the gateway computer; and

program instructions to generate a report of concerning security of said the network perimeter based upon results generated by the program instructions to review security of the network perimeter, the program instructions to review security of the firewall, the program instructions to review security of applications that transfer data across the network perimeter, the program instructions to review security of the authentication computer, and the program instructions to review vulnerability of the gateway computer at the network perimeter, all said reviews.

Claims 17-20 (Canceled)

Please enter new claims 21-31, as follows:

21. (New) The computer program product of claim 16 wherein the program instructions to review security of a firewall including program instructions to assess protection by the firewall against probing into the network perimeter apart from vulnerability to subsequent related attack via the firewall, based in part on the message flow rules of the firewall.

22. (New) The computer program product of claim 23 further comprising program instructions, stored on at least one of the one or more storage devices, to review security of the application that transfers data across the network perimeter based on a location of data transferred by the application and whether the transferred data is encrypted.

23. (New) The computer program product of claim 16 wherein the application that transfers data across the network perimeter is installed in a computer system, and further comprising program instructions, stored on at least one of the one or more storage devices, to scan ports of the computer system to determine whether unauthorized services are available within the network perimeter from the computer system, and identify and execute penetration tests on the computer system to attempt to exploit a vulnerability of the computer system as revealed by the scanning of the ports on the computer system.

24. (New) The computer program product of claim 16 further comprising program instructions, stored on at least one of the one or more storage devices, to review security of a server computer within the network perimeter that provides data to an application outside of the perimeter.

25. (New) The computer program product of claim 16 further comprising program instructions, stored on at least one of the one or more storage devices, to review security of the application that transfers data across the network perimeter based on a location of data transferred by the application and whether the transferred data is encrypted.

26. (New) A computer system for assessing security of a network perimeter, the computer system comprising:

one or more processors, one or more computer-readable memories, one or more computer-readable tangible storage devices, and program instructions stored on at least one of the one or more storage devices for execution by at least one of the one or more processors via at least one of the one or more memories, the program instructions comprising:

program instructions to review security of the network perimeter by executing tests to attempt to circumvent security controls of the network perimeter;

program instructions to review security of a firewall at the network perimeter by analyzing message flow rules of the firewall;

program instructions to review security of an application that transfers data across the network perimeter by analyzing message flows and a protocol used by the application;

program instructions to review security of an authentication computer from attack, the authentication computer residing within the network perimeter and authenticating users outside of the network perimeter that request access to an application within the network perimeter;

program instructions to review vulnerability of a gateway computer at the network perimeter from applications outside of the network perimeter by scanning ports on the gateway computer to determine whether unauthorized services from the applications outside the network perimeter are available within the network perimeter via the gateway computer, and determining and executing penetration tests on the gateway computer to attempt to exploit a vulnerability of the gateway computer as revealed by the scanning of the ports on the gateway computer; and

program instructions to generate a report of security of the network perimeter based upon results generated by the program instructions to review security of the network perimeter, the program instructions to review security of the firewall, the program instructions to review security of applications that transfer data across the network perimeter, the program instructions to review security of the authentication computer, and the program instructions to review vulnerability of the gateway computer at the network perimeter.

27. (New) The computer system of claim 26 wherein the program instructions to review security of a firewall including program instructions to assess protection by the firewall against probing into the network perimeter apart from vulnerability to subsequent related attack via the firewall, based in part on the message flow rules of the firewall.

28. (New) The computer system of claim 27 further comprising program instructions, stored on at least one of the one or more storage devices for execution by at least one of the one or more processors via at least one of the one or more memories, to review security of the application that transfers data across the network perimeter based on a location of data transferred by the application and whether the transferred data is encrypted.

29. (New) The computer system of claim 26 wherein the application that transfers data across the network perimeter is installed in a computer system, and further comprising program instructions, stored on at least one of the one or more storage devices, to scan ports of the computer system to determine whether unauthorized services are available within the network perimeter from the computer system, and identify and execute penetration tests on the computer system to attempt to exploit a vulnerability of the computer system as revealed by the scanning of the ports on the computer system.

30. (New) The computer system of claim 26 further comprising program instructions, stored on at least one of the one or more storage devices for execution by at least one of the one or more processors via at least one of the one or more memories, to review security of a server computer within the network perimeter that provides data to an application outside of the perimeter.

31. (New) The computer system of claim 26 further comprising program instructions, stored on at least one of the one or more storage devices for execution by at least one of the one or more processors via at least one of the one or more memories, to review security of the application that transfers data across the network perimeter based on a location of data transferred by the application and whether the transferred data is encrypted.

32. (New) A computer program product for assessing security of a network perimeter, the computer program product comprising:

one or more computer-readable tangible storage devices and program instructions stored on at least one of the one or more storage devices, the program instructions comprising:

program instructions to review security of an authentication computer from attack, the authentication computer residing within the network perimeter and authenticating users outside of the network perimeter that request access to an application within the network perimeter;

program instructions to review vulnerability of a gateway computer at the network perimeter from applications outside of the network perimeter by scanning ports on the gateway computer to determine whether an unauthorized service from an application outside the network perimeter is available within the network perimeter via the gateway computer; and

program instructions to generate a report of security of the network perimeter based upon results generated by the program instructions to review security of the authentication computer, and the program instructions to review vulnerability of the gateway computer at the network perimeter.

33. (New) The computer program product of claim 32 further comprising program instructions, stored on at least one of the one or more storage devices, to assess protection by a firewall against probing into the network perimeter apart from vulnerability to subsequent related attack via the firewall, based in part on the message flow rules of the firewall.

34. (New) The computer program product of claim 33 further comprising program instructions, stored on at least one of the one or more storage devices, to review security of an application that transfers data across the network perimeter based on a location of data transferred by the application and whether the transferred data is encrypted.

35. (New) The computer program product of claim 34 wherein the application that transfers data across the network perimeter is installed in a computer system, and further comprising program instructions, stored on at least one of the one or more storage devices, to scan ports of the computer system to determine whether unauthorized services are available within the network perimeter from the computer system, and identify and execute penetration tests on the computer system to attempt to exploit a vulnerability of the computer system as revealed by the scanning of the ports on the computer system.

36. (New) The computer program product of claim 32 further comprising program instructions, stored on at least one of the one or more storage devices, to review security of a server computer within the network perimeter that provides data to an application outside of the perimeter.

37. (New) The computer program product of claim 32 further comprising program instructions, stored on at least one of the one or more storage devices, to review security of an application that transfers data across the network perimeter based on a location of data transferred by the application and whether the transferred data is encrypted.